INDEX TO VOL. IX.

PAGE

ADDAMS, H., Disc. on Furnace Heating 104
Address of President KENRICK 7
AYLSWORTH, GEO. M., Paper No. CXV., The Scientific Basis and Commercial Feasibility of Heat Radiators Using Air Instead of Water or Steam 259
ASHWORTH, DANIEL, Disc. on Radiators Using Air, 286; on Flues for Boilers 297
BARRON, H. J., Disc. on Furnace Heating, 100, 125; on Gas Flue System, 151; Paper CIX., Heating Boiler Development, 153; Disc. on Proportioning Boilers, 197; on Vacuum Systems, 213; on Screwed Joints for Pipe 217
BOLTON, R. P., Paper No. CVIII., Smoke and Gas Flue System in the Ansonia Apartment-House, New York, 144; Disc. on Engineers Giving Free Information 200
BLACKMORE, J. J., Paper No. CX., The Capacity of Cast Iron Sectional Steam Boilers 160
Branches of the Society, Their Desirability 29
Boilers, Water-Tube vs. Fire-Tube 215
Boilers, Rating of Cast Iron Sectional 167, 290
CAMPBELL, ROBERT, Disc. on Furnace Heating 98
CARPENTER, B. H., Paper No. CVI., Test of a Hot Air Gravity System of Heating and Ventilating in a School Building 111
CARPENTER, Prof. R. C., Disc. on Furnace Heating, 94, 102; Paper CVII., Test of a Cast Iron Heating Surface in Connection with the Fan System of Heating, 131; Disc. on Radiator Nipples 188
CHEW, F. K., Disc. on Radiators Using Air, 274; on Grate and Heating Surface in Furnaces 327
COBEY, L. J., Disc. on Defective Steam-Heating System 250
Code for Testing Direct Radiation Heating Plants 347
Committee on Compulsory Legislation, Report of 14
Committee on Uniform Contract 19, 396
Committee on Grate Area in Boilers 22
Committee on Standards, Code for Testing 347
Committee on Tenth Annual Meeting 48
CONNOLLY, JOHN A., Disc. on Furnace Heating 92
Contract, Uniform, Proposed by the Society, 336; Discussion of 39

PAGE

Corrosion of Radiators. 188, 298
CRANE, H. D., Disc. on Defective Steam Heating System, 257; on Pipe for High Pressure. 319
DEAN, MARK, Disc. on Defective Steam Heating System 244
Election of Officers, Report of Tellers 32
Fan System of Heating, Paper CVII., by R. C. CARPENTER 131
Furnace Heating and Ventilating System in the Public Library at Ilion, N. Y., Paper No. CV., by W. H. SWITZER. 83
Furnace Heating of a School Building, Paper No. CVI., by B. H. CARPENTER 111
GORMLY, JOHN, Paper No. CXIV., Description of a Low-Pressure Steam-Heating System Which Proved Defective in Operation 238
HARRIS, JOHN J., Paper No. CXI., Cooling an Auditorium by Means of Ice 179
Heating and Ventilating by Hot-Air Furnaces, Paper CV., 83; Paper CVI 111
Heating System, Low Pressure, Defective in Operation, Paper CXIV. 238
Hot-Air Furnace, Heating and Ventilating by 83, 111
Humidity, Effect of, on Heating Systems 323
JELLETT, S. A., Disc. on Publishing a Journal, 26; on Proposed Uniform Contract, 39; on Fan System of Heating, 139; on Proportioning Boilers 193
KENRICK, A. E., Presidential Address 7
KENT, WILLIAM, Disc. on Furnace Heating, 92, 124; on Smoke and Gas-Flue System, 150; on Rating Cast Iron Sectional Boilers, 167, 290; on Proportioning Boilers, 191; on Engineers Giving Free Information, 201; on Water-Tube Boilers, 215; on Soft Coal Burning, 222; on Defective Steam-Heating System, 244; on Radiators Using Air 270
KINEALY, J. H., Paper No. CIV., Temperature Regulation, 63; Disc. on Furnace Heating, 103, 122; on Screwed Joints in Pipes 218
Legislation, Report of Committee on 14
Lien Laws, Disc. by S. A. JELLETT 42
LYMAN, C. M., Disc. on Furnace Heating 101
MACKAY, W. M., Disc. on Cooling an Auditorium, 185; on Proportioning Boilers, 196; on Defective Steam-Heating System, 249; on Radiators Using Air, 375; on Space in Radiators 294
MALONEY, D. J., Disc. on Hot-Air Heating 128
MACKAY, JAMES, Disc. on Radiator Nipples, 190; on Proportioning Boilers 194
Metric System, Proposition for a Letter Ballot on 235
OLDACRE, C. E., Disc. on Furnace Heating, 94, 130; on Radiators Using Air, 278; on Effect of Humidity in Warm-Air Heating, 324; Oil-Burning Devices 220
PAUL, ANDREW G., Disc. on Vacuum Systems 211
Pipe, Screwed vs. Flange Joints in 217
Proceedings of the Annual Meeting 7
Proceedings of the Semi-Annual Meeting 227

PAGE

QUAY, D. M., Disc. on Engineers Giving Free Information, 203; on Reserve Power in Boilers, 207; on Screwed Joints for Pipe..... 219
Radiators Using Air Instead of Water or Steam, Paper CXV., by GEO. M. AYLSWORTH..... 259
Radiators, Corrosion of.....188, 298
Report of the Committee on Legislation..... 14
Report of the Committee on Uniform Contract..... 19, 336
Report of the Committee on Grate Area in Boilers..... 22
Report of the Committee on Tenth Annual Meeting.....1, 48, 229
Report of the Committee on Standards, Code for Testing..... 347
Report of the Secretary..... 9
Report of the Treasurer..... 11
Report of the Board of Governors..... 12
ROCKWOOD, G. I., Disc. on Furnace Heating, 100; on Proportioning Boilers..... 191
RUTZLER, E., Disc. on Screwed Joints for Pipe..... 219
School-houses, Proposed Law for Ventilation of, 15; Hot-Air Heating of..... 111
SHERMAN, L. B., Disc. on Cast-Iron Boilers..... 176
SMITH, H. A., Disc. on Defective Steam-Heating System..... 247
Smoke and Gas Flue System in the Ansonia Apartment House, New York, Paper CVIII., by R. P. Bolton..... 144
SNELL, H. I., Disc. on Fan System of Heating..... 141
SWITZER, W. H., Disc. on Branches of the Society, 29; Paper No. CV., Furnace Heating and Ventilating System in the Public Library at Ilion, N. Y., 83; Disc. on Radiators Using Air, 272; on Heating Furnaces..... 330
Temperature Regulation, Paper CIV., by J. H. KINEALY..... 63
Testing Direct Radiation Heating Plants, Code for..... 347
Thermostats, see Temperature Regulation.
TOPICAL DISCUSSIONS, ANNUAL MEETING:
No. 1. In the manufacture of radiator nipples should steel, wrought iron or malleable iron be used to insure the greatest durability? 188
No. 2. In boilers for heating, should they be proportioned to the building or to the radiation provided?.....
No. 4. To what extent should an engineer place his knowledge at the disposal of those who need it? 199
No. 5. Should the heating engineer be expected to provide reserve power in the heating boiler?..... 204
No. 6. Are there any advantages in the use of vacuum systems of heating for residences?..... 211
No. 7. For plants where the steam pressure does not exceed 100 lbs., which is to be preferred, a water-tube or a fire-tube boiler? 215
No. 8. What is the largest size of pipe that should be used with screwed joints only?..... 217
No. 11. On fuel oil burning devices for use in heating apparatus? 220
No. 12. For soft coal burning, what changes are necessary in a hard coal apparatus?..... 222

PAGE

TOPICAL DISCUSSIONS, SEMI-ANNUAL MEETING:
No. 1. What is the proper method of rating steam and hot-water boilers for heating purposes? 289
No. 2. The relation of space between sections to the efficiency of steam and hot-water radiators 293
No. 3. The advantages and disadvantages in the use of wrought or sheet iron for steam and hot-water radiators 298
No. 4. Can a wrought-iron nipple for radiators be made durable by any system of coating? 303
No. 5. The advisability of forming local chapters of the society... 304
No. 6. The relative dimensions, weight and material in piping systems for pressure of 200 lbs 317
No. 7. Is there any reliable short rule for approximating cost of piping systems? 322
No. 8. The effect of humidity on the load on warm-air heating system. 323
No. 9. The relative importance of grate and heating surface in furnace heated buildings 327
No. 10. The relative value of fire-pot and other surfaces in hot-air furnaces 334
Uniform Contract, Report of Committee on, 19, 336; discussion of report 39
Water-Pans in Hot-Air Furnaces, Disc 108, 326
Water-Tube Boilers, Disc. Topic No. 7 215
Vacuum Systems of Heating for Residences 211
Ventilating of Public Buildings, Proposed Law in State of New York 15